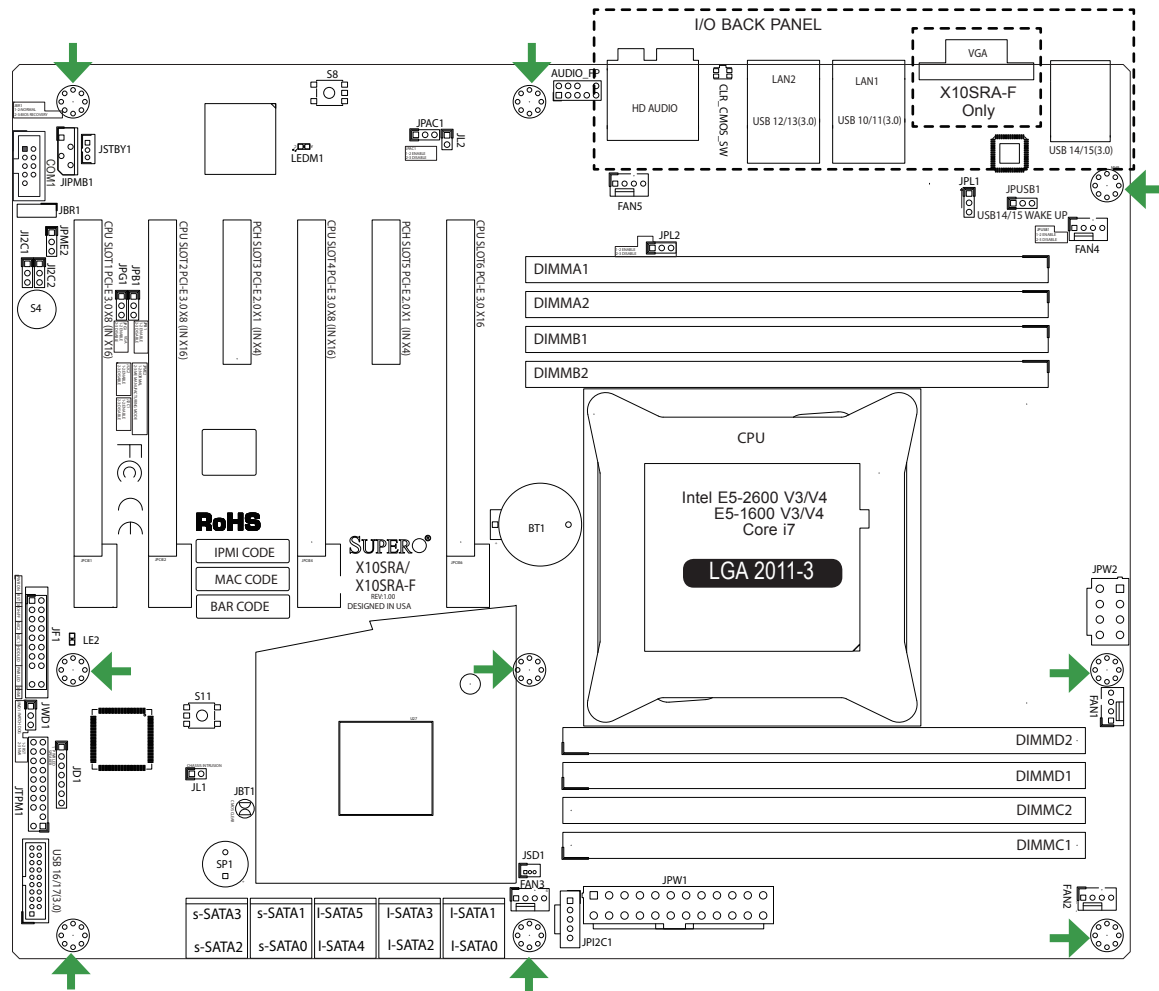**CONTACT INFORMATION**
- www.supermicro.com (Email: support@supermicro.com)
- Manuals: http://www.supermicro.com/support/manuals
- Drivers & Utilities: ftp://ftp.supermicro.com
- Safety: http://www.supermicro.com/about/policies/safety_information.cfm

PACKAGE CONTENTS (Applies to individual-pack only)
- One (1) Supermicro Motherboard
- Six (6) SATA Cables (single packed/boxed only)
- Two (2) SATA Cables (bulk packed only)
- One (1) I/O Shield
- One (1) Quick Reference Guide

Motherboard Layout and Features

Note for VGA Cards: For a single VGA card, install the VGA card into the SLOT6 (x16) slot. For CrossFireX™ mode (two VGA cards linked), install one card each into SLOT6 (x16) and SLOT4 (x16) slots.

Note for Intel CPUs: PCIe Slot#1 (x4) and Slot#4 (x16) are disabled when an Intel Core i7-5820K is installed. This is due to the CPU having a limitation of 28 PCIe lanes, compared to 40 with other CPU models.

= mounting hole

CPU Installation

Align Socket Keys

Heatsink Installation

Screw #4
Screw #2
Screw #3

Front Panel Control (JF1)

	20	19	
Ground	⊙	⊙	NMI
X	⊙	⊙	X
Power LED	⊙	⊙	Vcc
HDD LED	⊙	⊙	Vcc
NIC1 LED	⊙	⊙	Vcc
NIC2 LED	⊙	⊙	Vcc
OH/Fan Fail LED	⊙	⊙	Vcc
Power Fail LED	⊙	⊙	Vcc
Ground	⊙	⊙	#3~4 Reset Button
Ground	⊙	⊙	#1~2 Power Button
	2	1	

Note: Graphics shown in this quick reference guide are for illustration only. Your components may or may not look exactly the same as drawings shown in this guide.

Jumpers, Connectors and LED Indicators

Jumpers

Jumper	Description	Default
JBT1*	Clear CMOS (on board)	(See Chpt. 2)
JI²C1/JI²C2	SMB to PCI Slots	Off (Disabled)
JPAC1	Audio Enable	Pins 1-2 (Enabled)
JPL1/JPL2	LAN1/LAN2 Enable	Pins 1-2 (Enabled)
JPME2	Intel Recovery Mode	Pins 2-3 (Disabled)
JWD1	Watch Dog Enable	Pins 2-3 (NMI)
JBR1	BIOS Recovery Mode	Pins 2-3 (Disabled)
JPUSB1	USB Wake Up Enable (Back Panel)	Pins 1-2 (Enabled)
JPB1	BMC Enable/Disable (X10SRA-F only)	Pins 1-2 (Enabled)
JPG1	Onboard VGA Enable (X10SRA-F only)	Pins 1-2 (Enabled)

Connectors and Switches

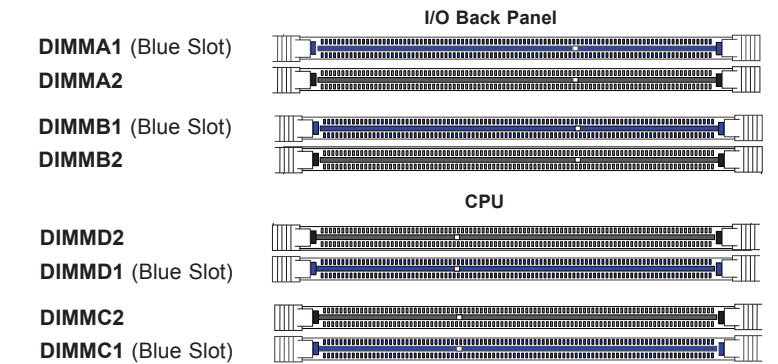| Connector	Description
I/O Back Panel	See Back Panel I/O Connectors, below right
Audio FP	Front Panel Audio Header
BT1	Onboard Battery
Fan 1,2,3,4,5	System/CPU Fan Headers (Fan1: CPU Fan)
JD1	Speaker/buzzer (Pins 1~4: External Speaker, Pins 3~4: Buzzer)
JF1	Front Panel Control Header
JL1	Chassis Intrusion Header
JPW1	24-pin ATX Main Power Connector (Required)
JPW2	+12V 4-pin CPU power Connector (Required)
JSD1	SATA DOM (Disk On Module) Power Connector
JSTBY1	Standby Power Header
SP1	Internal Speaker/Buzzer
I-SATA0~5	(Intel C612) SATA 3.0 Ports 0~5 (6Gb/sec), Supports RAID 0, 1 ,5 & 10
s-SATA0~3	(Intel C612) SATA 3.0 Ports 0~3 (6Gb/sec), Supports RAID 0, 1 ,5 & 10
USB 16/17	Front Panel Accessible USB 3.0 Headers 16/17
S4	Power Button
S11	Restores the BIOS from Firmware ('SUPER.ROM') on a USB memory device
S8	Clear CMOS Button (on board)
JPI2C1	Power Supply SMBbus I2C Header.
JTPM1	Trusted Platform Module Header
COM1	Serial Port Header for COM1
JIPMB1	System Management Bus header (for IPMI only)

LED Indicators

LED	Description	Color/State	Status
LEDM1	BMC Heartbeat (X10SRA-F only)	Green: Blinking	BMC Normal
LE2	Power LED	Green: Steady	System On/Running

* For the X10SRA-F, reboot time may be longer after clearing CMOS. This is due to the additional IPMI functions.

Note: Refer to Chapter 2 of the User Manual for detailed information on jumpers, connectors, and LED indicators.

Memory Support

The X10SRA (-F) supports up to 512GB of ECC LRDIMM, up to 2400MHz, or 256 ECC RDIMM, up to 2400Mhz, or up to 64 ECC/Non-ECC Unbuffered UDIMM (for Core i7 only), up to 2400MHz, in 8 memory slots. Populating these DIMM modules with a pair of memory modules of the same type and same size will result in interleaved memory, which will improve memory performance.

Note: Use only DIMM modules that have been validated by Supermicro. For the latest memory updates, please refer to our website at http://www.supermicro.com/products/motherboard.

DIMM Memory Installation

I/O Back Panel

- DIMMA1 (Blue Slot)
- DIMMA2
- DIMMB1 (Blue Slot)
- DIMMB2

CPU

- DIMMD2
- DIMMD1 (Blue Slot)
- DIMMC2
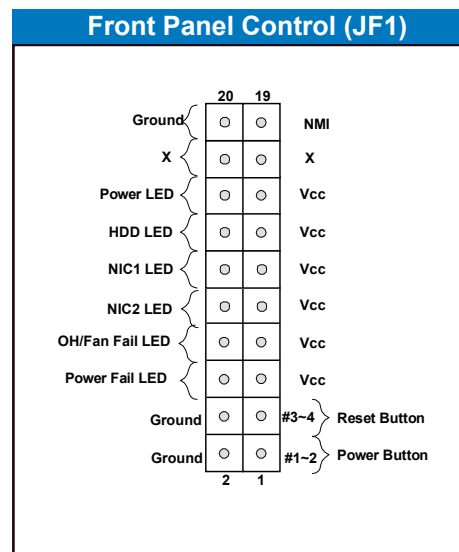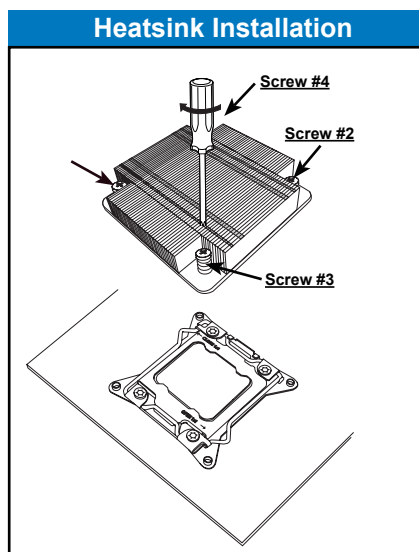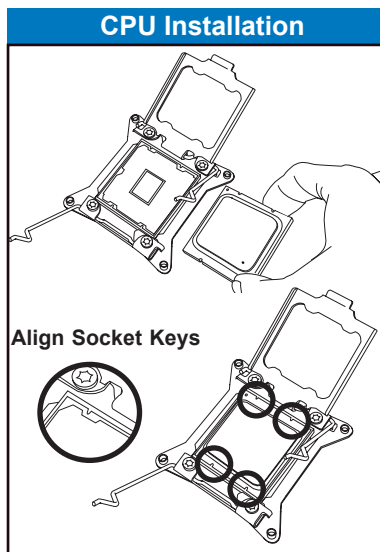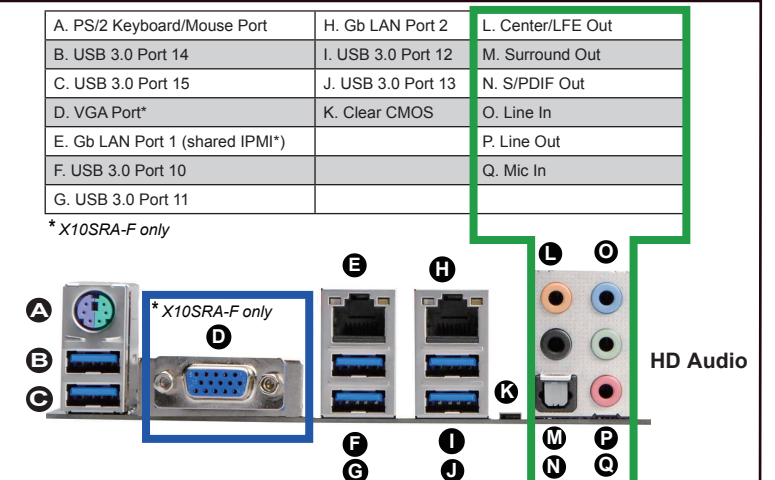- DIMMC1 (Blue Slot)

Memory Population Guidelines

When installing memory modules, the DIMM slots should be populated in the following order: DIMMA1, DIMMB1, DIMMC1, DIMMD1 then DIMMA2, DIMMB2, DIMMC2, DIMMD2.

- Always use DDR4 DIMM modules of the same size, type and speed.

Recommended Population (Balanced)

DIMMA1	DIMMB1	DIMMC1	DIMMD1	DIMMA2	DIMMB2	DIMMC2	DIMMD2	Total System Memory
4GB	4GB							8GB
4GB	4GB	4GB	4GB					16GB
4GB	4GB	4GB	4GB	4GB	4GB			24GB
4GB	4GB	4GB	4GB	4GB	4GB	4GB	4GB	32GB

Note: Up to 512GB (LRDIMM) / 256GB (RDIMM) / 64GB (UDIMM for Core i7 only) are supported. See chapter 2 of the User Manual for memory population information.

Back Panel I/O Connectors

A. PS/2 Keyboard/Mouse Port	H. Gb LAN Port 2
B. USB 3.0 Port 14	I. USB 3.0 Port 12
C. USB 3.0 Port 15	J. USB 3.0 Port 13
D. VGA Port*	K. Clear CMOS
E. Gb LAN Port 1 (shared IPMI*)	L. Center/LFE Out
F. USB 3.0 Port 10	M. Surround Out
G. USB 3.0 Port 11	N. S/PDIF Out
	O. Line In
	P. Line Out
	Q. Mic In

* X10SRA-F only

HD Audio

Note: Refer to Chapter 2 of the User Manual for detailed information on memory support and CPU/motherboard installation instructions.